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PAPTTPKEPTPTTPKEPAPTTKBPAPTTPKEPAPTAPKKPAPTTPKBPAPTTPKEPAP
TTTKEPSPTTPKEPAPTTTKSAPTTTKEPAPTTTKSAPTTPKSPAPTTKBPAPTTPK
                                                                                                                                                                                                                                                                                                                                                            HSU70136 S041 bp mRNA linear PRI 29-SEP-1996
Human megakaryocyte stimulating factor mRNA, complete cds.
U70136
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Cambridge, MA 0218-1908
Location/Qualifiers
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3 (bases 1 to 5041)
1 Loary, K.J., Fitz, L.J., Temple, P., Jacobs, K., Larson, D.,
Leary, A.C., Kelleher, K., Giannotti, J., Calvetti, J., Fitzgerald, M.,
Kriz, M.-J., Ferenz, C., Grobholz, J., Fraser, H., Bean, K.,
Norton, C.R., Gesner, T., Bhatia, S., Kriz, R., Hewick, R. and
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Turner, K.J., Fitz, L.J., Temple, P., Jacobs, K., Larson, D.,
Leary, A.C., Kelleher, K., Giannotti, J., Calvetti, J., Fitzgerald, M.,
Kriz, M.-J., Ferenz, C., Grobholz, J., Fraser, H., Bean, K.,
Norton, C.R., Gesner, T., Bhatia, S., Kriz, R., Hewick, R. and
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mononuclear cells"
      1366 ABPTyrTyrAlaPheSerLysAspGlnTyrTyrAsnIleAspValProSerArgThrAla 1385
                                           1087 GATTACTATGCCCTTTCTAAAGATCAATACTATAACATCGACGTGCCAAGTAGGACAGGA 1146
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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slood 78 (Suppl. 1), 279 (1991)
slood 78 (Fitz, 1)
ferberg, D. M., Fitz, L.-J., Temple, P., Giannotti, J., Murtha, P.,
strzgerald, M., Scalterco, J., Kelleher, K., Preissner, K., Kriz, R.,
Jacobs, K. and Turner, K.
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BIOLOGY OF VITRONECTINS AND THEIR RECEPTORS.: 45-52;
                                                                                                                                                                                                                                         RESULT 3
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, TOIG of: u70136 check: 6448 from: 1 to: 5041
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/db_xref="taxon:9606"
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1 (bases 1 to 1855)
Plannery, C.R., Hughes, C.B., Schumacher, B.L., Tudor, D., Aydelotte, M.B., Kuettner, K.B. and Caterson, B. Articular cartilage superficial zone protein (SZP) is homologous to megakaryocyte stimulating factor precursor and Is a multifunctional proteoglycan with potential growth-promoting, cytoprotective, and lubricating properties in cartilage metabolism Blophys. Res. Commun. 254 (3), 535-541 (1999)
                                                                                      PKELAPTTTKEPTSTTSDKPAPTTPKETAPTTPKEPAPTTPKKPAPTTPETPBPTTSB
VSTPTTTKEPTTIHKSPDESTPBLSABPTPKALENSPKBPGVPTTKTPAATKPEMTT
AKDKTTERDLATTPSTTTAAPGMTKETATTSTTSBKITATTGVTSTTTGOTTPBF
TTLKTTTLAPKYTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTPKPGKPTAPKTPF
PTSTKKPKTTPKPGKRTTTTTSTTTTTTTTTTTPKPGKPTKAPKT
FTSTKKPKTMPRVKRKTTTPPRKMTSTMPELNPTSRIABANLOTTRRNGTPNSKL
EVNPKSEDAGGAEGETPHMLLRPHVFMPBVTPDMDYLPRRVPNQTIINPMLSDBTNI'
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Bos taurus superficial zone protein mRNA, partial cds.
AFOS6218
                                                                                                                                                                                                                                                                  BGKTFPFKDSQYWRFTNDIKDAGYPKPIFKGFGGLTGGIVAALSTAKYKNWPBSVYFF
KRGGSIQQYIYKQEPVQKCPGRRPALNYPVYGEMTQVRRRRFBRAIGPSQTHTIRIQY
SPARLAYQDKGVLHNEVKVSILWRGLPNVVTSAISLPNIRKPDGYDYYAPSKDQYYNI
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3PAPTTPKKPAPTTPKEPAPTTPKBPAPTTTKKPAPTAPKBPAPTTPKGTAPTTPKKK
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Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos
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    (bases 1 to 1855)
    Schumacher, B.L., Hughes, C.B., Kuettner, K.B., Caterson, B. and
Aydelotte, M.B.

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Bovidae; Bovinae; Bos.

I (basea I to 1855)
Flannery, C.R., Hughes, C.E., Schumacher, B.L., Tudor, D.,
Aydelocte, M.B., Kuettner, K.E. and Caterson, B.

Articular cartilage superficial zone protein (SZP) is homologous to megakaryocyte stimulating factor precursor and is a multifunctional proteoglycan with potential growth-promoting, cytoprotective, and lubricating properties in cartilage metabolism

Blochem. Blophys. Res. Commun. 254 (3), 535-541 (1999)
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KVSTLWRGLPNVVTSAISLPNIRKPDGYDXYALSKDQYYNIDVPSRTARAITTRSGQT
                                                                       Bos taurus superficial zone protein mRNA, partial cds.
APO56218
APO56218.1 GI:3676500
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Schumacher, B.L.
Direct Submission
Submitted (31-MAR-1998) Biochemistry Jelke 1306, Rush University,
1653 W. Congress Pkwy., Chicago, IL 60612, USA
Location/Qualifiers
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/db_xref="GI:3676501"
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1713.50 86.22* 80.20* 22.77*

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                                                                                       73 dcacccaaaaagcccacrrccaccaaaaagccaagaaca---ccragagrgagaaaacca
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             13 CCAAAAGGCAGAGCTACTAATTCTCAAGTGACAACTCCTAAACGGCAGAAACGAAACCAAA
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Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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-OUT=compar - MINMATCH=0.1 -LOOPCL=0 -LIST=45 -DOCALIGN=200 -THR SCORE=pct
-THR MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext
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-LCONGLOG -THRRADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10
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U70136
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(c) 1993 - 2004 Compugen Ltd.
                                                                                     frame_plus_p2n model
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NGKPVDGLTTLRNGTLVAFRGHYFWMLSPFSPPSPARITBVWGIPSPIDTVFTRCNC
EGKTFFFKDSQYWRFTNDIKDAGYPKPIFKGFGGLTGQIVAALSTAKYKWWPESVYFF
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Submitted (09-SEP-1996) Genetics Institute, 87 CambridgePark Drive,
Cambridge, MA 02140, USA
Location/Qualifiers
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SPARLAYQDKGYLHNEVKVSILWRGLPNVVTSAISLFNIRKPDGYDYYAFSKDQYYNI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Megakaryocyte Stimulating Factor that has Megakaryocyte Colony Stimulating Activity
Stimulating Activity
Blood 78 (Suppl. 1), 279 (1991)
2 (bases 1 to 5041)
Merberg, D.M., Fitz, L.J., Temple, P., Giannotti, J., Murtha, P., Fitz, E., G., Kelleher, K., Preisener, K., Kriz, R., A. Comparison of Vitronectin and Megakaryocyte Stimulating Factor (in) Preisener, K., Rosenblatt, S., Kost, C., Wegerhoff, J. and
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BIOLOGY OF VITRONECTINS AND THEIR RECEPTORS.: 45-52;
BISEVIER Science Publishers B.V. (1993)
3. (bases I to 5041)
Turner, K.J., Fitz, L.J., Temple, P., Jacobs, K., Larson, D.,
Leary, A.C., Kelleher, K., Giannotti, J., Calvetti, J., Fitzgerald, M.,
Kriz, M.-J., Ferenz, C., Grobholz, J., Praser, H., Bean, K.,
Norton, C.R., Gesner, T., Bhatia, S., Kriz, R., Hewick, R. and
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Turner,A.C., Kelleher,K., Giannotti,J., Calvetti,J., Fitzgerald,M.,
Kriz,M.-J., Ferenz,C., Grobholz,J., Fraser,H., Bean,K.,
Norton,C.R., Gesner,T., Bhatla,S., Kriz,R., Hewick,R. and
Clark,S.C.
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Pred. No Score: Percent	: Similarity:	상 옵 	321 LeuAlaProThrSerLysValLeuAlaLysProThrProLysAlaGluThrThrLys 340
Query Ma	100.00% Indels:	% a	341 GlyProAlaLeuThrThrProLysGluProThrProThrThrProLysGluProAlaSer 360
0y	56-246-1 (1-1404) x u70136 (1-5041) 1 MetAlaTrpLysThrLeuProlleTyrLeuLeuLeuLeuLeuSerValPheValIleGln 20	상 옵	1
	GlavalSerSerGlaAspLeuSerSerCysAlaGlyArgCysGlyGlyGlyTyrSerArg 4	Qy qq	4 -
8 8 8	94 CARGITICATCICARGATITATCARGCIGIGCAGGGAGATGIGGGGGGAAGGGGTATI 41 ASPALAThrCysAsnCysAspTyrAsnCysGlnHisTyrMetGluCysCysPro?	yo da	42
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ි ඊ සි	GlyArgGluCysAspCysAshAlaGlnCysUysLysTyrAspLysCysPr 	ò da	441 LysLysProAlaProThrThrProLysGluProAlaProThrThrProLysGluProThr 460
8 8 8	GluSerPheCysAlaGluValHisAsnProThrSerProProSerSerLysBysAlaPro 12	oy Oy	461 ProThrThrProLysGluProAlaProThrThrLysGluProAlaProThrThrProLys 480
8 8 8	ProproserGlyAlaSerGlnThr1leLysSerThrThrLysArgSerProLysProPro 1 [111] [11] [11] [111] [111] [111] [111] [111] [111] [111] [111] [111] [111] [11] [11] [111] [111] [111] [111] [111] [111] [111] [111] [111] [111] [11] [111] [111] [111] [111] [111] [111] [111] [111] [111] [111] [11] [11] [111] [111] [111] [111] [111] [111] [111] [111] [111] [111] [11] [11] [111] [111] [111] [111] [111] [111] [111] [111] [111] [111] [11] [11] [11] [11] [11] [11] [11] [11] [11] [11] [11] [11] [11] [11] [1	ço da	481 GluProAlaProThrAlaProLyslysProAlaProThrThrProLysGluProAlaPro 500
8 & 8	394 CCACCITICAGGACGICICAAACCAICAAAICAACAAACGIICACCCAAACCACA 453 141 AsnLysLysLysTyrLysLysVallleGluSerGluGluIleThrGluGluHisSerVal 160 [[[[[[[]]]]]][[[[]]][[[]]][[[]]][[[]]][[[]]][[][[][[]][[]][[]][[]][[]][[][[]][[]][[]][[]][[]][[]][[]][[]][[][[]][[]][[]][[]][[]][[]][[][[]][[]][[]][[]][[]][[]][[]][[]][[]][[][[]][[]][[]][[]][[]][[]][[][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]]	ov du	52 15
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8 8 8	634 AAAGATAACAAGAAAGAAATAAAAAAACTAAAACTACCCCCAAACCAAACCAAGATTGTAGAT 693 221 GlualaGlySerGlyLeuAspAsnGlyAspPheLy8ValThrThrProAspThrSerThr 240 [[[[[[[[[[[[[[[[[[[[[[[[[[[[[[[[[[[[% a	18
3 8 8	ThrGlnHisAsnLysValSerThrSerProLysIleThrThrAlaLysProIleAsnPro 26	γο da	601 AlaProThrAlaProLysGluProAlaProThrThrProLysGluThrAlaProThrThr 620
8 8 7	ACCCAACACAATAAAGTCAGCACATCTCCCAAAGATCACAACAGCAAAAACCAAT ArgProSerLeuDroProAsnSerAspThrSerLysGluThrSerLeuThrVa	. da	621 ProlyslysbeuthrProThrThrProGlubysbeualaProThrThrProGlubysPro 640
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;

Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;

Bukaryota, Metazoa, Cetartiodactyla, Ruminantia, Pecora, Bovoidea,

Bovidae, Bovinae, Bos.

I (bases I to 1855)

Flannery, C.R., Hughes, C.E., Schumacher, B.L., Tudor, D.,

Articular cartilage superficial zone protein (SZP) is homologous to

megakaryocyte stimulating factor precursor and Is a multifunctional

proteoglycan with potential growth-promoting, cytoprotective, and

lubricating properties in cartilage metabolism

Biochem. Biophys. Res. Commun. 254 (3), 535-541 (1999)
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HMIFRPPVLTPIVIPGTELIVRGPSQGFGINPMFSDETNLCNGRPVDGLTTLRNGTLV
AFRGHYFWMLTPPTPPPPPRALTEVWGIPSPLDTVFTRCNCEGKTFFFKGSQYWRFTN
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KVSTLWRGLPNVVTSAISLPNIRKPDGYDYYALSKDQYXNIDVPSRTARAITTRSGQT
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Submitted (31-MAR-1998) Biochemistry Jelke 1306, Rush University,
1653 W. Congress Pkwy., Chicago, IL 60612, USA
Location/Qualifiers
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Bos taurus superficial zone protein mRNA, partial
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/db_xref="G1:3676501"
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/mol_type="mRNA"
/db_xref="taxon:9913"
/cell_type="chondrocyte"
/tissue_type="articular cartilage"
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Schumacher, B.L.
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                                                                                                                                                                                                                                                                                                                   190 TCT---TTACCAGAAGCCATGCTCCAAACCACCAGGCCTACCCCAACCCCAACTCA
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ProLygAspArgAlaThrAsnSerLysAlaThrThrProLysProGlnLysProThrLys
                                             ccaaaaggcagagcracraarrcrcaagrgacaacrccraaaccgcagaaaccaacaaa
                                                                                               AlabroLysLysProThrSerThrLysLysProLysThrMetProArgValArgLysPro
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Aydelotte,M.B.
Immunodetection and partial cDNA sequence of the proteoglycan,
superficial zone protein, synthesized by cells lining synovial
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Schumacher, B.L., Hughes, C.E., Kuettner, K.E., Caterson, B. and
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Best Local Similarity:
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L Blood 78 (Suppl. 1), 279 (1991)

E 2 (Dases 1 to 5041)

S Merberg, D.M., Fitz, L.J., Temple, P., Giannotti, J., Murtha, P., Jacobs, K. and Turner, K.

A Comparison of Vitronectin and Megakaryocyte Stimulating Factor

L (1n) Preissner, K.T., Rosenblatt, S., Kost, C., Wegerhoff, J. and Mosher, D.F. (Eds.):

BIOLOGY OF VITRONECTINS AND THEIR RECEPTORS.: 45-52;

Elsevier Science Publishers B.V. (1993)
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/db xref="G1:1572721"

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TVNKETTVETKETTTTNKQTSTDGKEKTTSAKETQSIEKTSAKDLAPTSKVLAKPTPK
AETTTKGPALTTPKEPAPTTPKEPASTTPKEPTPTTIKSAPTTPKEPAPTTTKSAPTT
PKEPAPTTTKEPAPTTPKEPAPTTTKEPAPTTTKSAPTTPKEPAPTTPKEPAPTTPKE
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TTTKEPSPTTPKEPAPTTKSAPTTTPK
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Submitted (09-SEP-1996) Genetics Institute, 87 CambridgePark Drive,
Cambridge, MA 02140, USA
Location/Qualifiers
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1 (bases 1 to 5041)

Turner, N. C., Filtz, L.J., Temple, P., Jacobs, K., Larson, D., Leary, A.C., Kelleher, K., Giannotti, J., Calvetti, J., Fitzgerald, M., Kriz, M.-J., Ferenz, C., Grobholz, J., Fraser, H., Bean, K., Norton, C.R., Gesner, T., Bhatia, S., Kriz, R., Hewick, R. and
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Turner,K.J., Fitz,L.J., Temple,P., Jacobs,K., Larson,D.,
Leary,A.C., Kelleher,K., Giannotti,J., Calvetti,J., Fitzgerald,M.,
Kriz,M.-J., Ferenz,C., Grobholz,J., Fraser,H., Bean,K.,
Norton,C.R., Gesner,T., Bhatia,S., Kriz,R., Hewick,R. and
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/mol_type="mRNA"
/db_xref="taxon:9606"
/cell_type="FHA and PMA activated human peripheral blood
mononuclear cells"
AspTyrTyrAlaPheSerLysAspGlnTyrTyrAsnIleAspValProSerArgThrAla 1385
                                                                   1087 GATTACTATGCCCTTTCTAAAGATCAATACTATAACATCGACGTGCCAAGTAGGACAGCA 1146
                                                                                                                                       ArgAlaIleThrThrArgSerGlyGlnThrLeuSerLysValTrpTyrAsnCysPro 1404
                                                                                                                                                                                     1147 AGAGCCATTACTACTCGTTCTGGGCAGACCTTATCCAATACCTGGTACAACTGTCCT 1203
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Human megakaryocyte stimulating factor mRNA, complete cds.
U70136
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/product="megakaryocyte stimulating factor"
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Butaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Butmaila, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovoidea, Bovidae, Bovines, Bos.

[a) (bases 1 to 1855)
[b] (bases 1 to 1855)
[c] (bases 2 to 1855)
[c] (bases 3 to 1855)
[c] (bases 3 to 1855)
[c] (bases 4 to 1855)
[c] (bases 5 to 1855)
[c] (bases 6 to 1855)
[c] (bases 7 to 1855)
[c] (bases 8 to 1855)
[c] (bases 8 to 1855)
[c] (bases 1 to 185
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Bos taurus superficial zone protein mRNA, partial cds.
AFOS6218 GI:3676500
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HMI FREPULTEIVI PGTEI IVRGESQGFGINDMESDETMLCNGREVDGLITLIKNGTLN
AFRGHYFWML TPFT PEPPPRRI TEVWGI PS.P.IDTVFTRCNCEGKTFFFRGSQYWRFTN
BICBAGY PKLI SKGFGGLAGKKIVAALSTAGVKSRESVYFFRGGSSQQYTKGBPTQ
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KVSTLWRGLPNVVTSAI SLPNI RKPDGYDYYALSKOQYYNI DVPSRTARAITTRSGQT
                                                                                                                                                                                                                                                                                                                                                                                          translation="EFPVPKGRATNSQVTTPKPQKPTKAPKKPTSTKKPRTPRVRKPK)
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                                                                                             Direct Submission
Submitted (11-MAR-1998) Biochemistry Jelke 1306, Rush University,
1653 W. Congress Pkwy., Chicago, IL 60612, USA
Location/Qualifiers
1. 1855
/ organism=Bos taurus"
/ mol type="memory by 13"
/ db xref="taxon:9913"
/ cell_type="chondrocyte"
/ tisue type="articular cartilage"
-1.1206
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